

WHAT IS CLAIMED IS:

1. A rubber crawler comprising:
an endless rubber elastomer;
core metals including protruding portions protruding from an inner circumference of the rubber elastomer and pairs of left-hand side and right-hand side wing portions embedded in the rubber elastomer; and
lugs formed at an outer circumference side of the rubber elastomer,
wherein two connecting members are fitted onto each of the left-hand side and right-hand side wing portions of each core metal in the longitudinal direction of the rubber elastomer, such that the adjacent core metals are sequentially connected with each other.
2. The rubber crawler of claim 1, wherein rails on which wheels travel are provided at outer sides of the protruding portions of the core metals, and the wing portions onto which the connecting members are fitted are formed at further outer sides of the rails.
3. The rubber crawler of claim 1, wherein a portion of the wing portions onto which the connecting members are fitted is formed with a substantially circular cross-sectional configuration.
4. The rubber crawler of claim 1, wherein a tip end portion of the wing portions is a protruding portion which is formed with a cross-sectional configuration different from that of the portion of the wing portions onto which the connecting members are fitted.
5. The rubber crawler of claim 4, wherein a protruding portion extending in the longitudinal direction of the rubber elastomer is formed at the tip end portion of the wing portions.

6. The rubber crawler of claim 4, wherein a protruding portion extending in the thickness direction of the rubber elastomer is formed at the tip end portion of the wing portions.
7. The rubber crawler of claim 1, wherein engaging portions, each having a substantially circular inner circumferential surface, are formed at both ends of the connecting members.
8. The rubber crawler of claim 1, wherein a flat portion is provided at one side of the connecting members, and is exposed at an inner circumferential surface of the rubber elastomer to form a rail on which wheels travel.
9. The rubber crawler of claim 1, wherein, as seen from a side view, a straight portion is formed at an inner circumferential side of the connecting members, an intermediate portion of the connecting members at an outer circumferential side thereof is recessed toward the inner circumference thereof, and engaging portions, each having a substantially circular inner surface, are formed at both ends of the connecting members.
10. The rubber crawler of claim 1, wherein the connecting members are arranged in a staggered form in the longitudinal direction of the rubber elastomer.
11. The rubber crawler of claim 10, wherein the connecting members are arranged in a staggered form in the longitudinal direction of the rubber elastomer, and lugs for substantially covering the connecting members at end sides in a transverse direction of the rubber elastomer are formed.
12. The rubber crawler of claim 10, wherein sets of the connecting members fitted onto the left-hand side and right-hand side wing portions of the core metals are arranged symmetrically in a transverse direction of the rubber elastomer.

13. The rubber crawler of claim 10, wherein sets of the connecting members fitted onto the left-hand side and right-hand side wing portions of the core metals are arranged asymmetrically in a transverse direction of the rubber elastomer.
14. The rubber crawler of claim 1, wherein the cross section of the wing portions at a side in contact with the connecting members is formed into a substantially circular-shaped configuration, and the cross section of the wing portions at another side not in contact with the connecting members is formed into a trapezoidal configuration.
15. The rubber crawler of claim 14, wherein an inclination angle θ of an inclining surface of the trapezoidal section ranges from 5° to 30°.
16. The rubber crawler of claim 1, wherein expanded portions are formed at both outer sides of the protruding portions of each core metal, and the wing portions, the connecting members and the expanded portions are embedded in the rubber elastomer or embedded therein with portions thereof being exposed.
17. The rubber crawler of claim 16, wherein the expanded portions are provided in the vicinities of left-hand side and right-hand side outer sides of the protruding portions of the core metals.
18. The rubber crawler of claim 16, wherein the expanded portions are provided at the midpoints of the wing portions toward the connecting members.
19. The rubber crawler of claim 16, wherein the expanded portions are provided at tip ends of the wing portions.
20. A rubber crawler comprising:

an endless rubber elastomer;
core metals including protruding portions protruding from an inner circumference of the rubber elastomer and pairs of left-hand side and right-hand side wing portions embedded in the rubber elastomer; and
lugs formed at an outer circumference of the rubber elastomer,
wherein fitting holes are formed at both ends of each of the wing portions, and tip end portions of a second connecting member which is bent into a substantially U shape are fitted into the fitting holes of the wing portions of each of the core metals adjacent to each other, such that all the core metals are sequentially connected to one another.

21. The rubber crawler according to claim 20, wherein the fitting holes are formed on the tip end surfaces of the wing portions.

22. The rubber crawler according to claim 20, wherein the fitting holes are formed so as to face sprocket engaging holes of the wing portions.

23. The rubber crawler according to claim 20, wherein the fitting holes formed at the ends of the wing portions are elongated holes into which the bent tip portions of the second connecting member are fitted at the same time.

24. The rubber crawler according to claim 20, wherein the fitting holes formed at the ends of the wing portion are elongated holes into which the bent tip portions of the second connecting member are fitted separately.

25. The rubber crawler according to claim 20, wherein the bent tip portions of the second connecting member is columnar.

26. The rubber crawler according to claim 20, wherein first connecting members are

alternately fitted onto the wing portions of the core metals adjacent to each other, and the second connecting members are mounted on the tip end portions of the wing portions onto which the first connecting members are not fitted, whereby all the core metals are sequentially connected to one another.

27. A rubber crawler comprising:

an endless rubber elastomer;

core metals including protruding portions protruding from an inner circumference of the rubber elastomer and pairs of left-hand side and right-hand side wing portions embedded in the rubber elastomer;

lugs formed at an outer circumference of the rubber elastomer; and

connecting members which are sequentially fitted, in a longitudinal direction of the rubber elastomer, onto the pairs of the left-hand side and right-hand side wing portions of the core metals which are arranged adjacent to each other, such that all the core metals are connected to one another,

wherein the wing portions are branched in the longitudinal direction to form a two-forked portion having branch portions, each of which is formed into a substantially circular cross-sectional configuration and onto which the connecting members are fitted.

28. The rubber crawler according to claim 27, wherein a third wing portion is interposed between the branch portions of the two-forked portion.

29. The rubber crawler according to claim 28, wherein the third wing portion interposed between the branch portions of the two-forked portion is flat in the longitudinal direction of the rubber elastomer.

30. The rubber crawler according to claim 28, wherein the third wing portion is longer than the branch portions of the two-forked portion.

31. The rubber crawler according to claim 27, wherein protruding portions are formed at the branch portions so as to face each other, the protruding portions aligning the connecting members fitted to the branch portions in place in the transverse direction.